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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,209	03/22/2004	Sung-Jen Hsiang		3289

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EXAMINER
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IWARERE, OLUSEYE

ART UNIT	PAPER NUMBER
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3687

MAIL DATE	DELIVERY MODE
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03/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,209	<b>Applicant(s)</b> HSIANG, SUNG-JEN	
	<b>Examiner</b> OLUSEYE IWARERE	<b>Art Unit</b> 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/22/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This communication is a First Office Action Non-Final rejection on the merits. Claims 1 – 10, as originally filed, are currently pending and have been considered below.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1 – 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Butani (2003/0172010).**

**As per claim 1**, Butani discloses a bill of material (BOM) comparison system for automatically comparing current BOMs with corresponding original BOMs, and recording differences between the BOMs if any change of design occurs ([abstract] discusses comparing two data sets, which are construed as BOMs and identifying differences), the system comprising:

a database comprising a changed BOM file for storing BOMs that need to be compared ([abstract] discusses a second dataset which is a modification to the first data

set), and an original BOM file for storing corresponding original BOMs that can be compared with the current BOMs ([abstract] discusses a first data set); and

a BOM comparison module for comparing contents of the changed BOM file and the original BOM file, and for generating a comparative BOM file (fig. 1 item 103 depicts an analysis module which performs the tasks).

**As per claim 2,** Butani discloses wherein the system comprises a plurality of BOM comparison modules (fig. 1 object 102 depicts the analysis module), each of which is installed in a respective designing computer (fig. 7 depicts the computer system in which the modules are installed).

**As per claim 3,** Butani discloses wherein the changed BOM file and the original BOM file comprise information on parts, including part item names, amounts of the parts in a product, the part's positions in the product, the part's specifications, and detailed descriptions of the parts ([0016] discusses these features that comprise the BOM files).

**As per claim 4,** Butani discloses wherein the comparative BOM file comprises a changed sub-file and a comparative sub-file ([abstract] discusses a first and second data set which is construed as a changed and comparative sub-file).

**As per claim 5**, Butani discloses further comprising a database connection module for connecting the BOM comparison module with the files in the database (fig. 2 depicts a data collection module), said files comprising the changed BOM file, the original BOM file and the comparative BOM file (Fig. 2 depicts items 208, 202 and 204 which are construed as these files).

**As per claim 6**, Butani discloses further comprising a database server that comprises a database management module for managing the changed BOM file, the original BOM file and the comparative BOM file, and for creating, adding, deleting, updating and inquiring of said files ([0045] discusses these functions of the analysis module).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. **Claims 7 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butani (2003/0172010) in view of Jernigan (5,210,686).**

**As per claim 7**, Butani discloses a bill of material (BOM) comparison method for automatically comparing current BOMs with corresponding original BOMs, and for recording differences between the BOMs if any change of design occurs ([abstract] discusses comparing two data sets, which are construed as BOMs and identifying differences), the method comprising the steps of:

retrieving a changed BOM file and an original BOM file ([abstract] discusses a second and first data set);

comparing information on parts in the changed sub-file with information on parts in the intermediate sub-file ([abstract] discusses a second and first data set which are construed as the changed and intermediate sub-files);

generating a plurality of sub-files to record comparative results (fig. 5, step 512 and paragraph [0041] discuss recording results); and

integrating the sub-files into a comparative BOM file ([0042] discusses a traversal tree that highlight the changes as a result, which is construed as a comparative BOM file).

However, Butani fails to explicitly disclose generating a changed sub-file according to the changed BOM file and generating an intermediate sub-file according to

the original BOM file.

Jernigan discloses a multilevel bill of material processing with the features of generating a changed sub-file according to the changed BOM file (col. 2, lines 32 – 39; discusses a temporary table or linked list array in memory);

generating an intermediate sub-file according to the original BOM file (col. 2, lines 32 – 39; discusses a temporary table or linked list array in memory).

From this teaching of Jernigan, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for analyzing data of Butani to include the sub-files taught by Jernigan, in order to further provide a means of evaluation.

**As per claim 8**, Butani discloses wherein the information on the parts comprises part item names, amounts of the parts in a corresponding product, the parts' positions in the product, the parts' specifications, and detailed descriptions of the parts ([0016] discusses these features that comprise the BOM files).

**As per claim 9**, Butani discloses wherein the comparative results comprise any one or more of parts that are added or deleted, and changes to amounts and positions of parts ([0014] discusses changes to data elements in the data set).

**As per claim 10**, Butani discloses wherein the sub-files comprise a changed sub-file and a comparative sub-file ([abstract] discusses a first and second data set

which is construed as a changed and comparative sub-file).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mukherjee et al. (US 5311424 A), which discloses a method and system for product configuration definition and tracking, Maki et al. (US 5307261 A), which discloses a Method and system for product configuration management in a computer based manufacturing system, Blair (US 20020087440 A1), which discloses a Method for reconstructing and validating a bill of materials and creating a comprehensive bill of materials, Yamada (US 5796614 A) which discloses a level-by-level explosion method for material requirements planning, and Ferriter (US 4847761 A), which discloses an Automated bill of material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUSEYE IWARERE whose telephone number is (571)270-5112. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on (571)272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.



Art Unit: 3627

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elaine Gort/  
Primary Examiner, Art Unit 3627

3/2/2008

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